PDB30
SAXAGLIPTIN/METFORMIN EXTENDED-RELEASE (XR) FOR THE TYPE 2 DIABETES (T2DM) TREATMENT IN VENEZUELA: A BUDGET IMPACT ANALYSIS
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**OBJECTIVES:** To estimate the budget impact of the use of saxagliptin/metformin XR fixed-dose combination compared to the current treatment of people with T2DM, in Venezuela. **METHODS:** We used an MS Excel-based budget impact model assuming coverage of one million people in the health care system of Venezuela, with a 3-year time horizon. DM prevalence was obtained from published literature. Pharmaceutical expenses of oral antidiabetic agents (OADs) were analyzed excluding other medical costs. The cost of OADs was based upon list prices, expressed in Venezuelan Bolivars (VEF$) 2013 (exchange rate: 1 US-dollar = 6.30 VEF$). The market share of the different drugs was based upon QUALIDIAB Database, market studies and data provided by Bristol-Myers Squibb. A progressive increase of market share was assumed for saxagliptin/metformin XR among all the OADs; 1.14%, 2.65% and 3.0% for the 1st, 2nd and 3rd year, respectively. The budget impact is reported in terms of annual budget impact, per member per-month (PMPM) and per patient per month (PPPM). A Monte Carlo simulation (10,000 iterations) was done as part of the sensitivity analysis. **RESULTS:** the net budget impact estimated for the introduction of saxagliptin/metformin XR combined was VEF$503,807 for the first year, VEF$1,183,333 for the second year and VEF$1,353,554 for the third year; the cumulative net budget impact was VEF$3,040,703. PMPM was VEF$0.04, VEF$0.10 and VEF$0.11 for the first, second and third year respectively. PPPM was VEF$1.67, VEF$4.0 and VEF$4.65 each year, respectively. The cumulative impact in the total annual budget for oral antidiabetic agents represented an increase of 2.36%. Monte Carlo simulation showed that cumulative budget impact varied from 1.32 to 8.74%. **CONCLUSIONS:** incorporation of saxagliptin/metformin XR combination into the health care system of Venezuela, as a treatment option for people with T2DM, would have a minimal budgetary impact.

PDB31
BUDGET IMPACT ANALYSIS OF UTILIZING CANAGLIFLOZIN (CANA) FOR THE TREATMENT OF TYPE 2 DIABETES MELLITUS (T2DM) IN AN UNITED STATES HEALTH PLAN
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**OBJECTIVES:** CANA, an SGLT2 inhibitor, is a recently approved oral antihyperglycemic agent (AHA) for the treatment of adults with T2DM. As the prevalence and cost of T2DM continue to rise, payers seek treatment options to improve care and reduce cost. Budget impact analysis may help payers in the formulary decision-making process. To estimate the three-year budget impact of adding CANA to a hypothetical health plan formulary in place of other branded AHAs. **METHODS:** The model was developed from the perspective of a US health plan with 1 million members. The prevalence of people diagnosed and treated with T2DM is based on US epidemiology statistics. Drug costs were estimated using August 2013 wholesale acquisition costs. Publically available estimates of 2012 market shares of the branded AHAs and estimated 2013, 2014, and 2015 market shares of CANA for Years 1-3 (Year 1: 0.3%, Year 2: 1.8%, Year 3: 2.1%) were used. The base case analysis examined an increasing CANA market share with a proportional decrease in the market share of the other branded drugs. Results are presented as the difference in pharmacy budget, overall and per-member per-month (PMPM). **RESULTS:** Prior to the introduction of CANA, the estimated pharmacy budget for branded non-insulin AHAs in this hypothetical plan was almost $48 MM/year. With CANA added to the formulary, the budget is forecasted to decrease by $71,902 at Year 1, $431,409 at Year 2, and $503,311 at Year 3. The PMPM expenditures decrease from $4.00 when CANA was unavailable to $3.95 at Year 3 of CANA uptake. **CONCLUSIONS:** The results show the positive budget impact of adding CANA to the formulary. As payers continually face rising health care costs, an AHA that can safely and effectively treat T2DM and lower pharmacy costs would be considered highly valuable.

PDB32
BUDGET IMPACT ANALYSIS OF INSULIN ANALOGUES FOR TYPE 1 DIABETES: THE CASE OF THE BRAZILIAN PUBLIC HEALTH SYSTEM (SUS)
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**OBJECTIVES:** Type 1 Diabetes Mellitus (T1DM) is an endocrine autoimmune disease with onset usually in childhood and which, being chronic, affects people of working age. It affects approximately 0.3% of the population and has high personal and social impact. The National Committee for Incorporation of Technologies in Health System (CONITEC) is responsible for recommending the inclusion or not of technologies in Brazilian public health system and has drawn up a budget impact analysis (BIA) of insulin analogues for the treatment of T1DM for help the decision making. **METHODS:** A BIA of insulin analogues in SUS compared to human insulin (NPH and Regular) was performed. The analysis' time horizon was 5 years, using a diabetes prevalence of 7.6% and 5% of T1DM between them (602,742), considering an annual growth rate of 0.8143% and a market share of 20%, 30%, 40%, 50% and 100%. The mean total insulin dose considered was 0.75IU/kg/day, with an average personal weight of 70kg, which means 52.5IU/day, 50% of each insulin type (basal and rapid). Unit purchase prices of insulins were obtained in the health system prices database and calculated the weighted average. For human insulins, were considered the values of last purchase of the Ministry of Health. **RESULTS:** The budget impact of basal analogues would be R$202.8 million in the 1st year, considering 20% of target population, reaching approximately R$1 billion in 100% of patients. For rapid analogues, the budget impact would be R$62.9 million in the 1st year, reaching R$324.9 million in 100% of patients. **CONCLUSIONS:** This BIA will be essential to support CONITEC's decision about insulin analogues for T1DM patients in Brazil. Treatment costs still impressive, considering that analogues' values reach 10 times the unit values of human insulins, fact that did not happen in other countries where they are already covered.

PDB33
THE ALBIGLUTIDE BUDGET IMPACT MODEL IPAD APPLICATION – A NEW, INTERACTIVE, USER-FRIENDLY PLATFORM DEMONSTRATING THE BUDGET IMPACT OF INCLUDING ALBIGLUTIDE ON MANAGED CARE FORMULARIES
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**OBJECTIVES:** The budget impact model (BIM) is recognized as a useful tool to help payers assess the economic value of new medicines approved for use. Although they are not considered as robust as cost effectiveness models, they do allow for short-term estimates of pharmacy impact and potential costs/offsets with the inclusion of the new medicine on formulary. Evolving IT platforms, such as the iPad, are offering new opportunities, but also changing end user expectations for these models. Albiglutide is an investigational, once weekly, Glucagon-Like Peptide-1 Receptor Agonist (GLP-1RA) for the treatment of Type 2 Diabetes (T2D). We describe the development of an iPad application (app) derived from an excel-based BIM for use with US payer customers to inform access and reimbursement decisions for albiglutide. **METHODS:** An excel-based BIM estimating the 1-5 year impact of including albiglutide on formulary compared to other available GLP-1RA's was developed as per guidance from AMCP and following ISPOR good research practices. Given the increased use and demand for apps, we transformed the excel model into an app that would allow for modeling simulations to be run on an iPad adhering to these good practice guidelines. **RESULTS:** The excel model was built according to the good practice guidelines and demonstrated the budget impact of introducing albiglutide for the treatment of T2D. The BIM was designed in a way to allow for successful conversion into a standalone app that utilized an improved user interface for interactive discussions around the value of albiglutide with US payers. **CONCLUSIONS:** The app version of the albiglutide BIM is a useful, complementary tool to the excel-based BIM. The app maintains its functionality according to ISPOR and AMCP recommendations.

PDB34
SOMATROPIN DOSE ANALYSIS FOR TREATMENT OF HYPOPITUITARISM IN PUBLIC BRAZILIAN HEALTH SYSTEM (SUS)
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**OBJECTIVES:** This analysis aims to determine, in International Units (IU), the somatropin volume waste of presentations with 4 IU and 12 IU compared to 16 IU and 36 IU, when used for treatment of Turner Syndrome and for children treatment with disorders of growth due to deficiencies of growth hormone. **METHODS:** The amount waste per month was analyzed, in IU, from the dosage indicated in the Project of Clinical Protocol Guideline (PCDT) for Hypopituitarism of the Brazilian Health Ministry and a comparative analysis was done between presentations of 4 IU/ 12 IU (approved by Ministry) and of 16 IU/ 36 IU. **RESULTS:** The average loss per treatment/month (Turner Syndrome and children with growth disorders) are 18,36 IU, 12,08 IU, 0,38 IU and 2,01 IU presentations with 4IU,12IU, 16IU and 36IU respectively. **CONCLUSIONS:** Therefore, if the SUS adopt presentations of 16IU or 36IU, that could be reduce the losses in an average of 97,5% and 87% respectively in month/patient, minimize the treatment cost, optimize doses number and achieve more patients. Moreover, it is more advantageous because they take up less space for storage and for transportation.

PDB35
IMPACT OF DIABETES IN FAMILY HEALTH SPENDING IN BRAZILIAN POPULATION
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**OBJECTIVES:** To estimate the impact of the cost of diabetes mellitus (DM) in Brazil based on the ratio ("R") of health care expenses of households with at least one person using medication for diabetes to those without diabetes medication use. **METHODS:** We utilized data from the Family Budget Study (POF – Pesquisa de Orçamentos Familiares), a representative sample of 59.548 households investigated in 2008-2009 by the Brazilian Institute of Geography and Statistics (IBGE). The data were analyzed using Microsoft Excel and R (version 3.0.2). Households were categorized based on the purchase (or no cost receipt) of diabetes medications by family members. Expenses included those for hospitalization, medical consultations, health insurance, drugs and medical supplies. Analyses were conducted for Brazil, for regions and for those with and without health insurance coverage. Results are weighted so as to represent the Brazilian population. **RESULTS:** Households with diabetes (6.2% of the total) more frequently (26.3% vs. 8.5%) had members >60 years of age. Expenses increased with increasing household income. Overall, for Brazil, the ratio "R", adjusted through regression analyses for the age and sex distribution of the family members, household income and regional location, was 1.81 (95%CI 1.69-1.95), indicating that expenses were 81% greater in households where diabetes was present than in those without. The expenses with the purchase of medicines to treat DM increase with increasing income. **CONCLUSIONS:** Health care expenses are notably greater in Brazilian households having family members with diabetes.

PDB36
DIET MODIFICATION IN PATIENTS WITH DIABETES AND ITS ASSOCIATION WITH HEATH CARE UTILIZATION AND EXPENDITURE
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